BENIGN CEMENTOBLASTOMA ASSOCIATED WITH AN UNERUPTED THIRD MOLAR - A CASE REPORT

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ABSTRACT:

Cementoblastoma is a rare odontogenic tumor derived from odontogenic ectomesenchyme of cementoblast origin that forms cementum layer on the roots of a tooth. A case report is presented of a patient treated with surgical excision of Cementoblastoma associated with an unerupted infected right lower third molar tooth.

Key words: Cementoblastoma, Odontogenic tumour, unerupted third molar.

INTRODUCTION:

Cementoblastoma is an odontogenic tumor of ectomesenchymal origin. It is also called cementoma. They are large bulbous mass of cementum or cementum-like tissue on roots of teeth. The cell of origin is cementoblast. Clinically it causes bony expansion. The commonest site is the posterior region of the mandible. In the radiograph it is seen as large radiopaque mass associated with the root of the tooth. We report a case of Benign Cementoblastoma from Sri Ramakrishna Dental College & Hospital, Coimbatore.

CASE REPORT:

A 41 year old man presented to our department with a complaint of pain and swelling in the right lower half of the face. Patient gave history of intermittent pain which subsided on medication for over a period of six months and the present swelling of the face for the past 2 weeks. On examination swelling was inflammatory and cortical expansion of the bone was elicited. Patient had restriction in opening the mouth and intra oral examination reveals a partially erupted third molar tooth with pus discharge. A panoramic radiograph showed a radio-opaque, dense, amorphous, irregularly shaped mass measuring 2.2 x 1.5cm attached with the third molar (Fig 1,1a). The border is well demarcated from bone. A clinical diagnosis of complex odontoma was made.

Fig 1

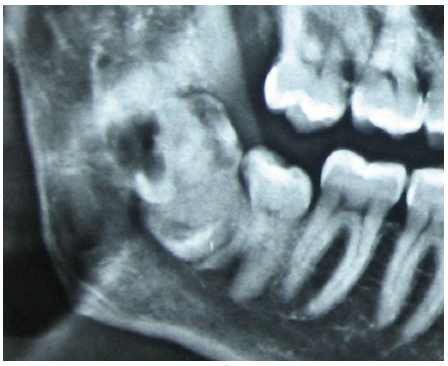

Fig 1a

The expansile mass at the angle-ramus region along with the third molar was surgically excised with the third molar through an intra oral approach. The mass was removed by curettage in several large pieces (Fig 2) and the third molar was extracted (Fig 3). The surgical area was packed with gel foam and closed with 3-0 silk suture. Patient recovery was uneventful.

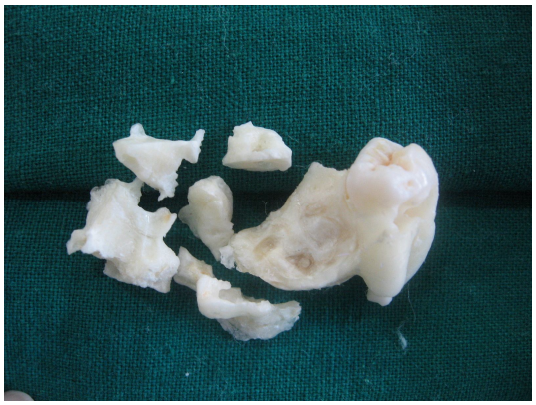

Fig 2

Fig 3

The soft tissue lining curetted along with the mass was sent for histopathological examination which was suggestive of inflammatory lesion. The decalcified hard tissue shows sheets of cementum like tissue with irregularly placed empty lacunae and prominent basophilic reversal lines suggestive of Cementoblastoma (Fig 4). Patient was advised to come regularly for follow up to detect any recurrence.

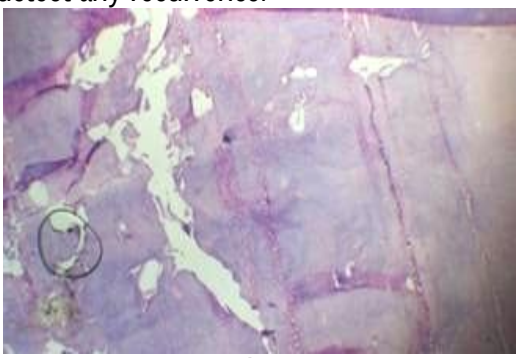

Fig 4

DISCUSSION:

Cementoblastoma is also called as true cementoma. The benign cementoblastoma was first recognized by Norberg in 1930 which is a slow-growing, benign odontogenic tumor arising from cementoblasts. Reported cases occurred in the middle age group, usually associated with the roots of the mandibular premolar and molar tooth [1, 2], however its

occurrence in the maxillary sinus[3,4] too have been reported and rarely in relation to primary tooth [5,6]. The differential diagnosis for a periapical radio-opacity includes cementoma[7], osteoblastoma, odontoma [8], periapical cemental dysplasia, condensing osteitis and hypercementosis.

Histologically, Cementoblastoma and Osteoblastoma had the same appearance including peripheral spiculae rimmed by swollen blasts. This histologic similarity between osteoblastoma and cementoblastoma indicates that the diagnosis of cementoblastoma should not be made unless the lesion is connected with tooth[9]. Cortical expansion of the bone does not occur in cemental dysplasia.The soft tissue recapitulation of the dental follicle associated with the mass is sent for histopathological study to rule out ameloblastic-fibro odontoma and calcifying odontogenic cyst. Lesions appearing radiolucent-radiopaque should be followed up. Surgical option for excision of the mass by sagittal-split[10] of the mandible should be discussed. Complications include fracture of the mandible and inferior alveolar nerve damage.

Research analysis and molecular studies had been aimed in finding of the cementum markers[11]. Since the lesion is of benign nature, complete excision of the tumour and the involved tooth is done. The tumour does not recur[12] after complete excision.

CONCLUSION:

We have reported a case of cementoblastoma in the mandible with review of literature. It should be considered as one of the differential diagnosis in bony swellings of mandible.

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None declared